

Sequence Listing

<210> 1

<211> 258

<212> PRT

<213> Artificial Sequence

<400> 1

Met Gln Gln Pro Phe Asn Tyr Pro Tyr Pro Gln Ile Tyr Trp Val

1 5 10 15

Asp Ser Ser Ala Ser Ser Pro Trp Ala Pro Pro Gly Thr Val Leu

20 25 30

Pro Cys Pro Thr Ser Val Pro Arg Arg Pro Gly Gln Arg Arg Pro

35 40 45

Pro Pro Pro Pro Pro Pro Pro Leu Pro Pro Pro Pro Pro

50 55 60

Pro Pro Leu Pro Pro Leu Pro Pro Leu Lys Lys Arg Gly

65 70 75

Asn His Ser Thr Gly Leu Cys Leu Leu Val Met Phe Phe Met Val

80 85 90

Leu Val Ala Leu Val Gly Leu Gly Leu Gly Met Phe Gln Leu Phe

95 100 105

His Leu Gln Lys Glu Pro Ser Pro Pro Glu Lys Lys Glu Leu

110 115 120

Arg Lys Val Ala His Leu Thr Gly Lys Ser Asn Ser Arg Ser Met

135

50

125

130

135

Pro Leu Glu Trp Glu Asp Thr Tyr Gly Ile Val Leu Leu Ser Gly

140

145

150

Val Lys Tyr Lys Lys Gly Gly Leu Val Ile Asn Glu Thr Gly Leu

155

160

165

Tyr Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys Asn

170

175

180

Asn Leu Pro Leu Ser His Lys Val Tyr Met Arg Asn Ser Lys Tyr

185

190

195

Pro Gln Asp Leu Val Met Met Glu Gly Lys Met Met Ser Tyr Cys

200

205

210

Thr Thr Gly Gln Met Trp Ala Arg Ser Ser Tyr Leu Gly Ala Val

215

220

225

Phe Asn Leu Thr Ser Ala Asp His Leu Tyr Val Asn Val Ser Glu

230

235

240

Leu Ser Leu Val Asn Phe Glu Glu Ser Gln Thr Phe Phe Gly Leu

245

250

255

Tyr Lys Leu

258

<210> 2

<211> 277

<212> PRT

<213> Artificial Sequence

<400> 2

Met Gln Gln Pro Phe Asn Tyr Pro Tyr Pro Gln Ile Tyr Trp Val
1 5 10 15

Asp Ser Ser Ala Ser Ser Pro Trp Ala Pro Pro Gly Thr Val Leu
20 25 30

Pro Cys Pro Thr Ser Val Pro Arg Arg Pro Gly Gln Arg Arg Pro
35 40 45

Pro Pro Pro Pro Pro Pro Pro Leu Pro Pro Pro Pro Pro Pro
50 55 60

Pro Pro Leu Pro Pro Leu Pro Leu Pro Pro Leu Lys Lys Arg Gly
65 70 75

Asn His Ser Thr Gly Leu Cys Leu Leu Val Met Phe Phe Met Val
80 85 90

Leu Val Ala Leu Val Gly Leu Gly Leu Gly Met Phe Gln Leu Phe
95 100 105

His Leu Gln Lys Glu Leu Ala Glu Leu Arg Glu Ser Thr Ser Gln
110 115 120

Met His Thr Ala Ser Ser Leu Gly His Pro Ser Pro Pro Pro Glu
125 130 135

Lys Lys Glu Leu Arg Lys Val Ala His Leu Thr Gly Lys Ser Asn
140 145 150

Ser Arg Ser Met Pro Leu Glu Trp Glu Asp Thr Tyr Gly Ile Val
155 160 165

Leu Leu Ser Gly Val Lys Tyr Lys Lys Gly Gly Leu Val Ile Asn

52

170

175

180

Glu Thr Gly Leu Tyr Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly

185

190

195

Gln Ser Cys Asn Asn Leu Pro Leu Ser His Lys Val Tyr Met Arg

200

205

210

Asn Ser Lys Tyr Pro Gln Asp Leu Val Met Met Glu Gly Lys Met

215

220

225

Met Ser Tyr Cys Thr Thr Gly Gln Met Trp Ala Arg Ser Ser Tyr

230

235

240

Leu Gly Ala Val Phe Asn Leu Thr Ser Ala Asp His Leu Tyr Val

245

250

255

Asn Val Ser Glu Leu Ser Leu Val Asn Phe Glu Glu Ser Gln Thr

260

265

270

Phe Phe Gly Leu Tyr Lys Leu

275

277

<210> 3

<211> 281

<212> PRT

<213> Artificial Sequence

<400> 3

Met Gln Gln Pro Phe Asn Tyr Pro Tyr Pro Gln Ile Tyr Trp Val

1

5

10

15

Asp Ser Ser Ala Ser Ser Pro Trp Ala Pro Pro Gly Thr Val Leu

20 25 30

Pro Cys Pro Thr Ser Val Pro Arg Arg Pro Gly Gln Arg Arg Pro

35 40 45

Pro Pro Pro Pro Pro Pro Pro Leu Pro Pro Pro Pro Pro Pro

50 55 60

Pro Pro Leu Pro Pro Leu Pro Leu Pro Pro Leu Lys Lys Arg Gly

65 70 75

Asn His Ser Thr Gly Leu Cys Leu Leu Val Met Phe Phe Met Val

80 85 90

Leu Val Ala Leu Val Gly Leu Gly Leu Gly Met Phe Gln Leu Phe

95 100 105

His Leu Gln Lys Glu Leu Ala Glu Leu Arg Glu Ser Thr Ser Gln

110 115 120

Met His Thr Ala Ser Ser Leu Glu Ala Gln Ile Gly His Pro Ser

125 130 135

Pro Pro Pro Glu Lys Lys Glu Leu Arg Lys Val Ala His Leu Thr

140 145 150

Gly Lys Ser Asn Ser Arg Ser Met Pro Leu Glu Trp Glu Asp Thr

155 160 165

Tyr Gly Ile Val Leu Leu Ser Gly Val Lys Tyr Lys Lys Gly Gly

170 175 180

Leu Val Ile Asn Glu Thr Gly Leu Tyr Phe Val Tyr Ser Lys Val

185 190 195

Tyr Phe Arg Gly Gln Ser Cys Asn Asn Leu Pro Leu Ser His Lys

200

205

210

Val Tyr Met Arg Asn Ser Lys Tyr Pro Gln Asp Leu Val Met Met

215

220

225

Glu Gly Lys Met Met Ser Tyr Cys Thr Thr Gly Gln Met Trp Ala

230

235

240

Arg Ser Ser Tyr Leu Gly Ala Val Phe Asn Leu Thr Ser Ala Asp

245

250

255

His Leu Tyr Val Asn Val Ser Glu Leu Ser Leu Val Asn Phe Glu

260

265

270

Glu Ser Gln Thr Phe Phe Gly Leu Tyr Lys Leu

275

280 281

<210> 4

<211> 774

<212> DNA to RNA

<213> Artificial Sequence

<400> 4

ATG CAG CAG CCC TTC AAT TAC CCA TAT CCC CAG ATC TAC TGG GTG 45

GAC AGC AGT GCC AGC TCT CCC TGG GCC CCT CCA GGC ACA GTT CTT 90

CCC TGT CCA ACC TCT GTG CCC AGA AGG CCT GGT CAA AGG AGG CCA 135

CCA CCA CCA CCG CCA CCG CCA CCA CTA CCA CCT CCG CCG CCG CCG 180

CCA CCA CTG CCT CCA CTA CCG CTG CCA CCC CTG AAG AAG AGA GGG 225

AAC CAC AGC ACA GGC CTG TGT CTC CTT GTG ATG TTT TTC ATG GTT 270

CTG GTT GCC TTG GTA GGA TTG GGC CTG GGG ATG TTT CAG CTC TTC 315

CAC CTA CAG AAG GAG CCC AGT CCA CCC CCT GAA AAA AAG GAG CTG 360
 AGG AAA GTG GCC CAT TTA ACA GGC AAG TCC AAC TCA AGG TCC ATG 405
 CCT CTG GAA TGG GAA GAC ACC TAT GGA ATT GTC CTG CTT TCT GGA 450
 GTG AAG TAT AAG AAG GGT GGC CTT GTG ATC AAT GAA ACT GGG CTG 495
 TAC TTT GTA TAT TCC AAA GTA TAC TTC CGG GGT CAA TCT TGC AAC 540
 AAC CTG CCC CTG AGC CAC AAG GTC TAC ATG AGG AAC TCT AAG TAT 585
 CCC CAG GAT CTG GTG ATG ATG GAG GGG AAG ATG ATG AGC TAC TGC 630
 ACT ACT GGG CAG ATG TGG GCC CGC AGC AGC TAC CTG GGG GCA GTG 675
 TTC AAT CTT ACC AGT GCT GAT CAT TTA TAT GTC AAC GTA TCT GAG 720
 CTC TCT CTG GTC AAT TTT GAG GAA TCT CAG ACG TTT TTC GGC TTA 765
 TAT AAG CTC 774

<210> 5

<211> 831

<212> DNA

<213> Artificial Sequence

<400> 5

ATG CAG CAG CCC TTC AAT TAC CCA TAT CCC CAG ATC TAC TGG GTG 45
 GAC AGC AGT GCC AGC TCT CCC TGG GCC CCT CCA GGC ACA GTT CTT 90
 CCC TGT CCA ACC TCT GTG CCC AGA AGG CCT GGT CAA AGG AGG CCA 135
 CCA CCA CCA CCG CCA CCG CCA CCA CTA CCA CCT CCG CCG CCG CCG 180
 CCA CCA CTG CCT CCA CTA CCG CTG CCA CCC CTG AAG AAG AGA GGG 225
 AAC CAC AGC ACA GGC CTG TGT CTC CTT GTG ATG TTT TTC ATG GTT 270
 CTG GTT GCC TTG GTA GGA TTG GGC CTG GGG ATG TTT CAG CTC TTC 315

CAC CTA CAG AAG GAG CTG GCA GAA CTC CGA GAG TCT ACC AGC CAG 360
 ATG CAC ACA GCA TCA TCT TTG GGC CAC CCC AGT CCA CCC CCT GAA 405
 AAA AAG GAG CTG AGG AAA GTG GCC CAT TTA ACA GGC AAG TCC AAC 450
 TCA AGG TCC ATG CCT CTG GAA TGG GAA GAC ACC TAT GGA ATT GTC 495
 CTG CTT TCT GGA GTG AAG TAT AAG AAG GGT GGC CTT GTG ATC AAT 540
 GAA ACT GGG CTG TAC TTT GTA TAT TCC AAA GTA TAC TTC CGG GGT 585
 CAA TCT TGC AAC AAC CTG CCC CTG AGC CAC AAG GTC TAC ATG AGG 630
 AAC TCT AAG TAT CCC CAG GAT CTG GTG ATG ATG GAG GGG AAG ATG 675
 ATG AGC TAC TGC ACT ACT GGG CAG ATG TGG GCC CGC AGC AGC TAC 720
 CTG GGG GCA GTG TTC AAT CTT ACC AGT GCT GAT CAT TTA TAT GTC 765
 AAC GTA TCT GAG CTC TCT CTG GTC AAT TTT GAG GAA TCT CAG ACG 810
 TTT TTC GGC TTA TAT AAG CTC 831

<210> 6

<211> 843

<212> DNA

<213> Artificial Sequence

<400> 6

ATG CAG CAG CCC TTC AAT TAC CCA TAT CCC CAG ATC TAC TGG GTG 45
 GAC AGC AGT GCC AGC TCT CCC TGG GCC CCT CCA GGC ACA GTT CTT 90
 CCC TGT CCA ACC TCT GTG CCC AGA AGG CCT GGT CAA AGG AGG CCA 135
 CCA CCA CCA CCG CCA CCG CCA CTA CCA CCT CCG CCG CCG CCG 180
 CCA CCA CTG CCT CCA CTA CCG CTG CCA CCC CTG AAG AAG AGA GGG 225
 AAC CAC AGC ACA GGC CTG TGT CTC CTT GTG ATG TTT TTC ATG GTT 270

CTG GTT GCC TTG GTA GGA TTG GGC CTG GGG ATG TTT CAG CTC TTC 315
CAC CTA CAG AAG GAG CTG GCA GAA CTC CGA GAG TCT ACC AGC CAG 360
ATG CAC ACA GCA TCA TCT TTG GAG GCA CAA ATA GGC CAC CCC AGT 405
CCA CCC CCT GAA AAA AAG GAG CTG AGG AAA GTG GCC CAT TTA ACA 450
GGC AAG TCC AAC TCA AGG TCC ATG CCT CTG GAA TGG GAA GAC ACC 495
TAT GGA ATT GTC CTG CTT TCT GGA GTG AAG TAT AAG AAG GGT GGC 540
CTT GTG ATC AAT GAA ACT GGG CTG TAC TTT GTA TAT TCC AAA GTA 585
TAC TTC CGG GGT CAA TCT TGC AAC AAC CTG CCC CTG AGC CAC AAG 630
GTC TAC ATG AGG AAC TCT AAG TAT CCC CAG GAT CTG GTG ATG ATG 675
GAG GGG AAG ATG ATG AGC TAC TGC ACT ACT GGG CAG ATG TGG GCC 720
CGC AGC AGC TAC CTG GGG GCA GTG TTC AAT CTT ACC AGT GCT GAT 765
CAT TTA TAT GTC AAC GTA TCT GAG CTC TCT CTG GTC AAT TTT GAG 810
GAA TCT CAG ACG TTT TTC GGC TTA TAT AAG CTC 843